

APPARATUS AND METHOD FOR INTER-PROGRAM AUTHENTICATION USING
DYNAMICALLY-GENERATED PUBLIC/PRIVATE KEY PAIRS

BOTZ

Docket No. ROC920030210US1

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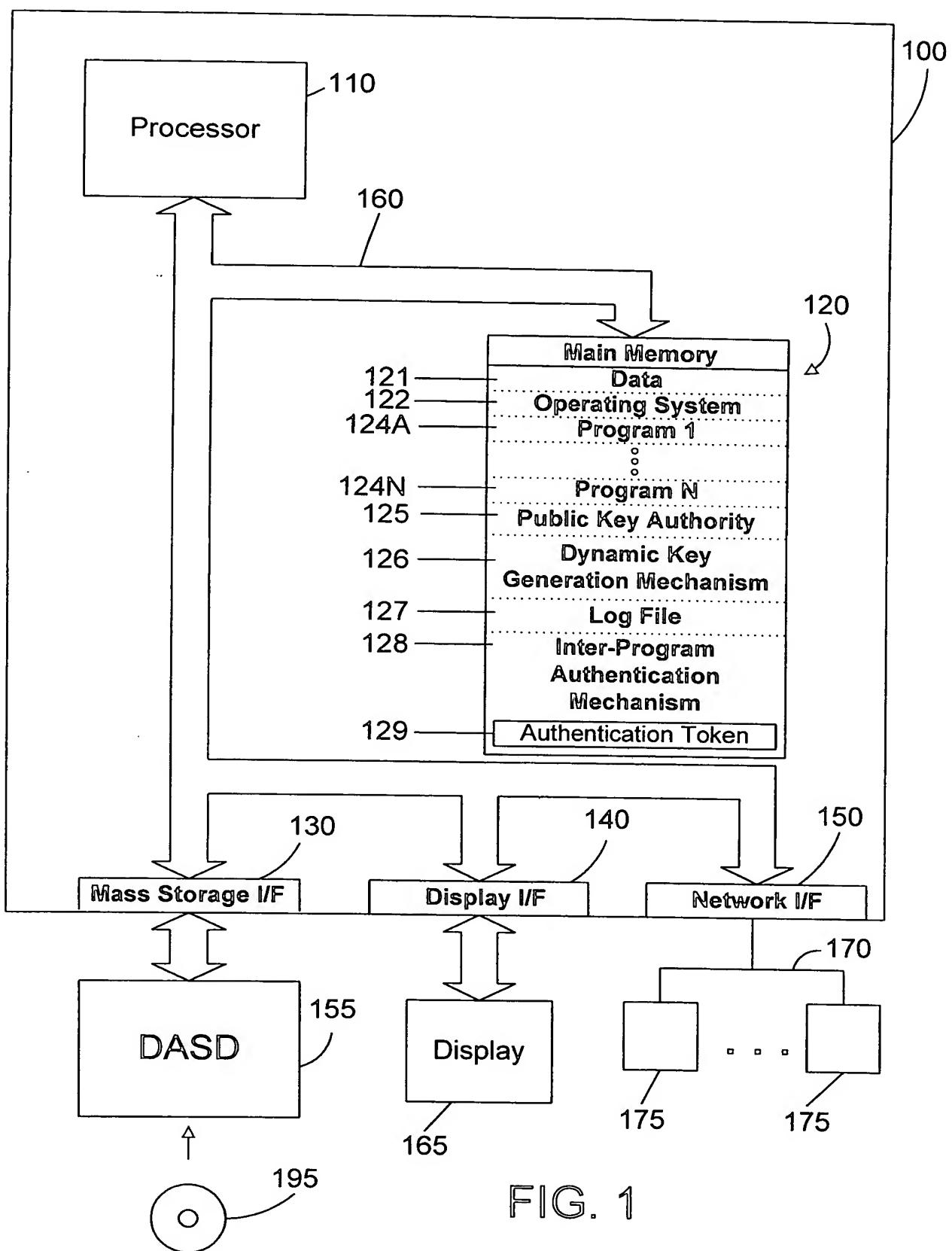


FIG. 1

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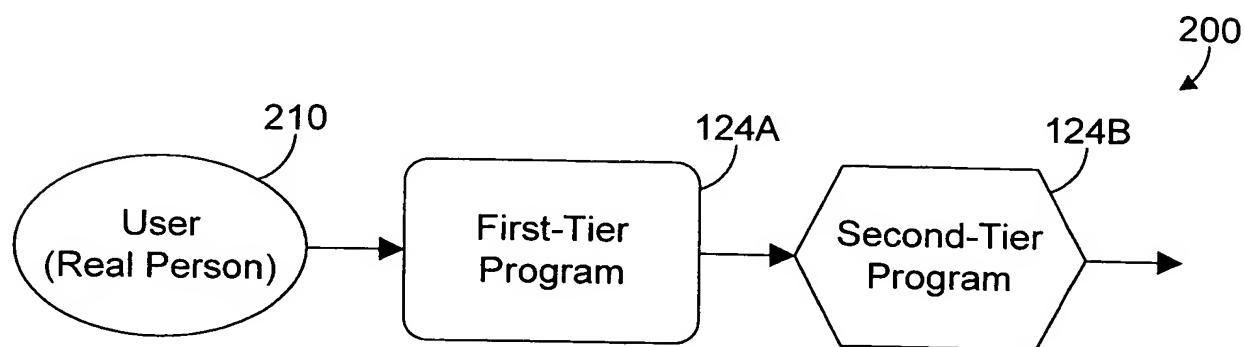


FIG. 2 Prior Art

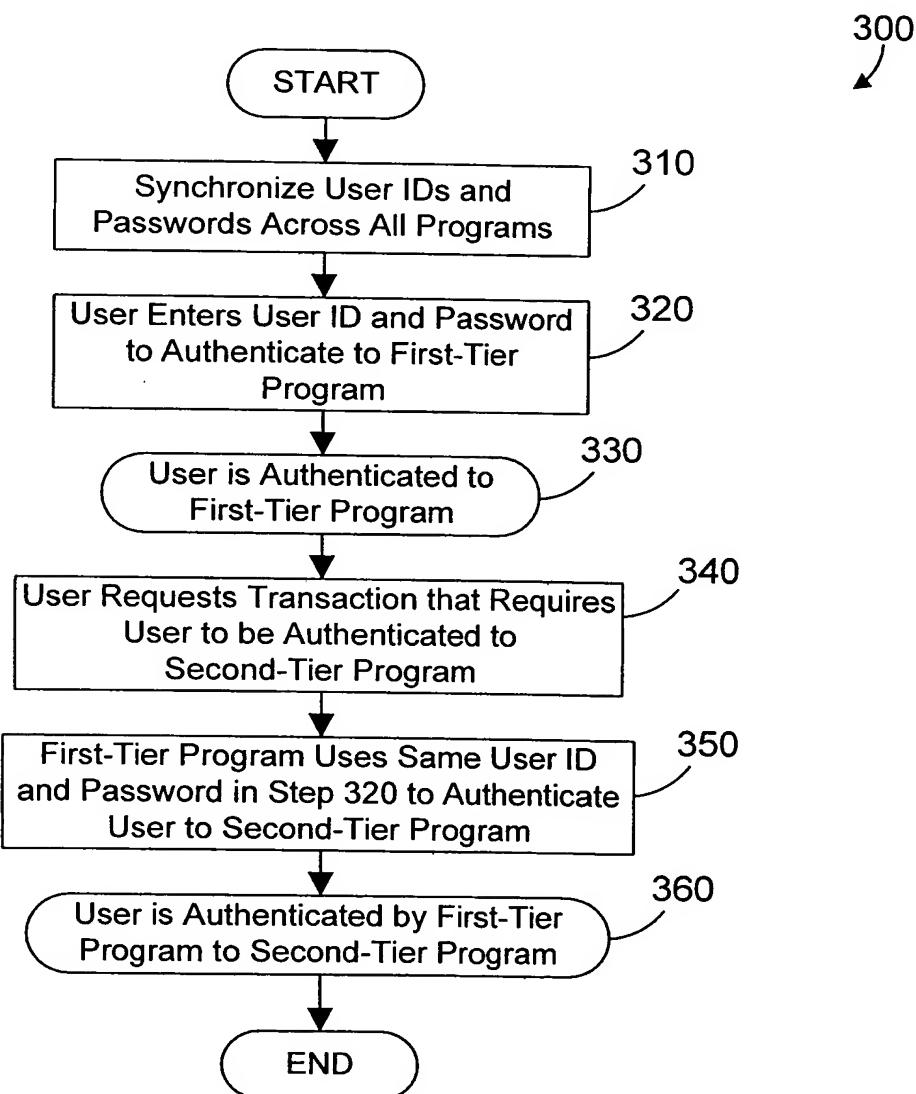


FIG. 3 Prior Art

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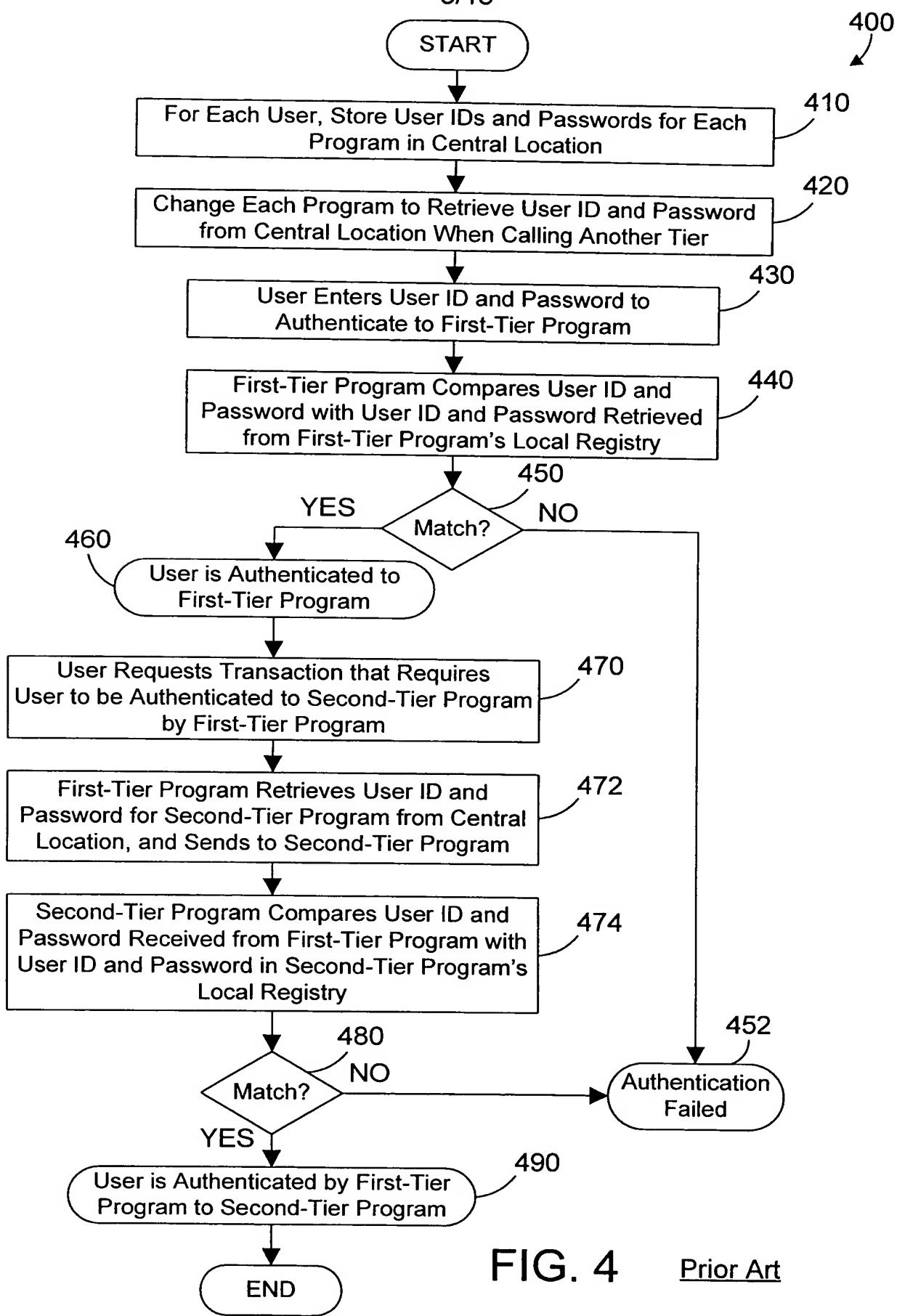


FIG. 4 Prior Art

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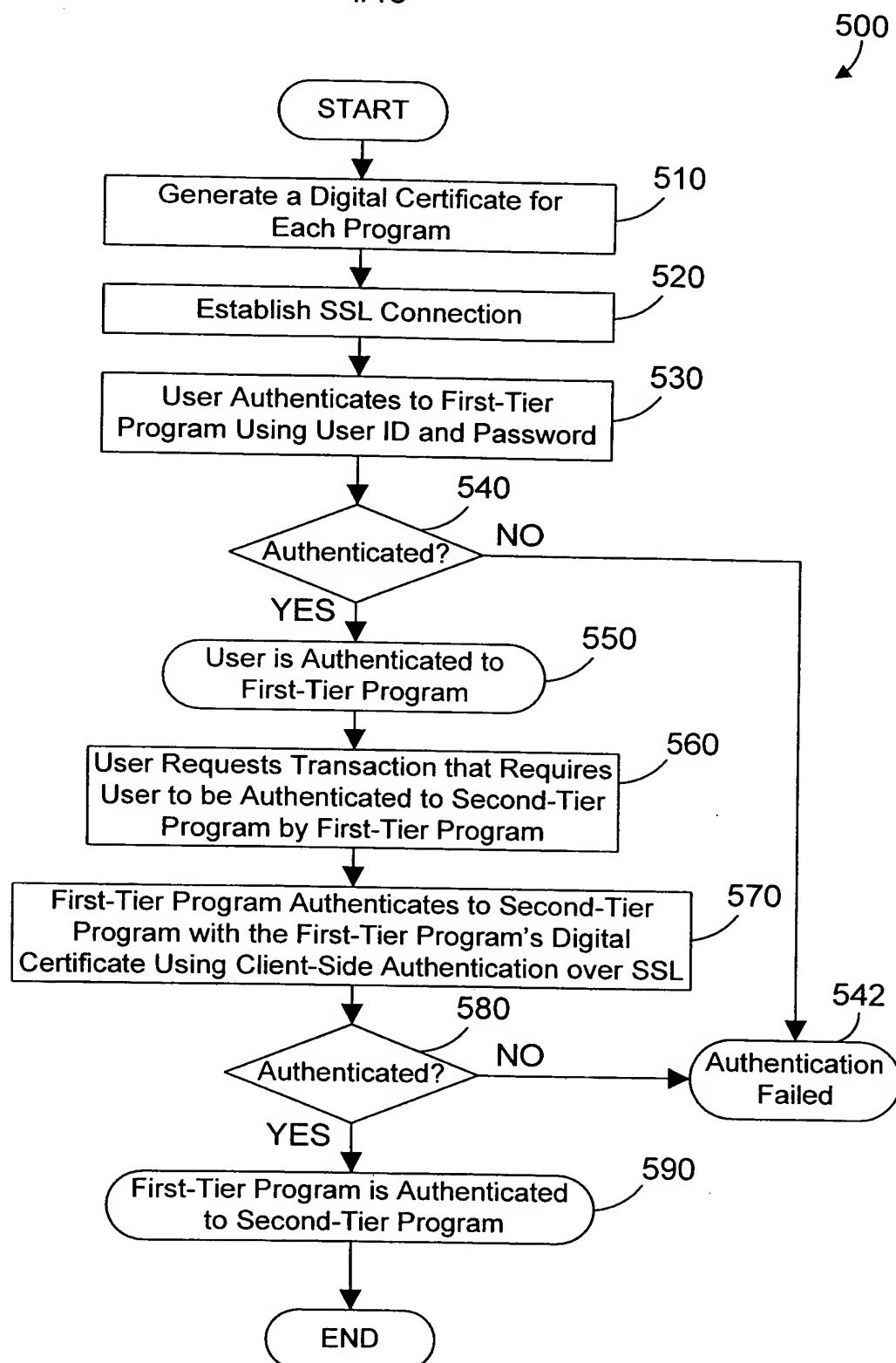


FIG. 5

Prior Art

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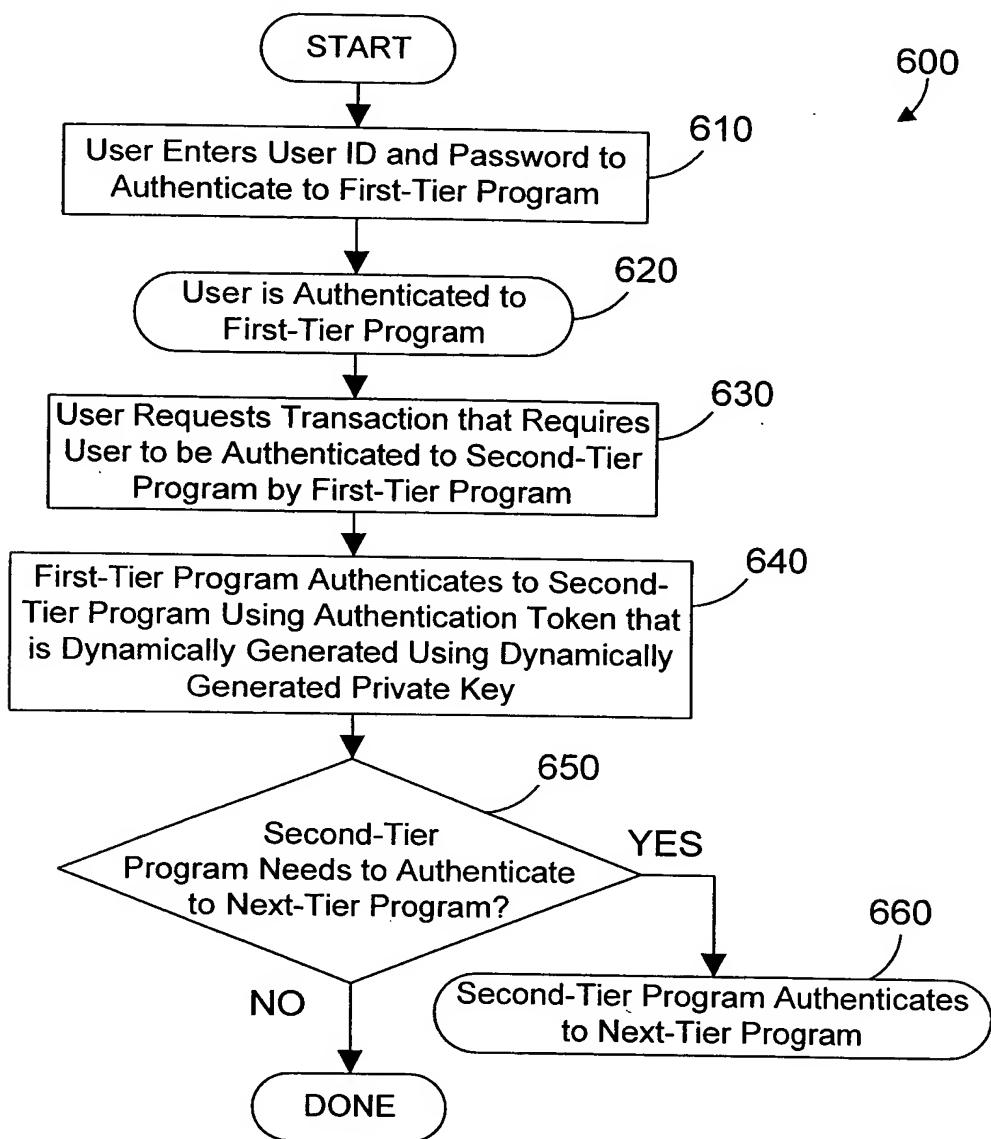


FIG. 6

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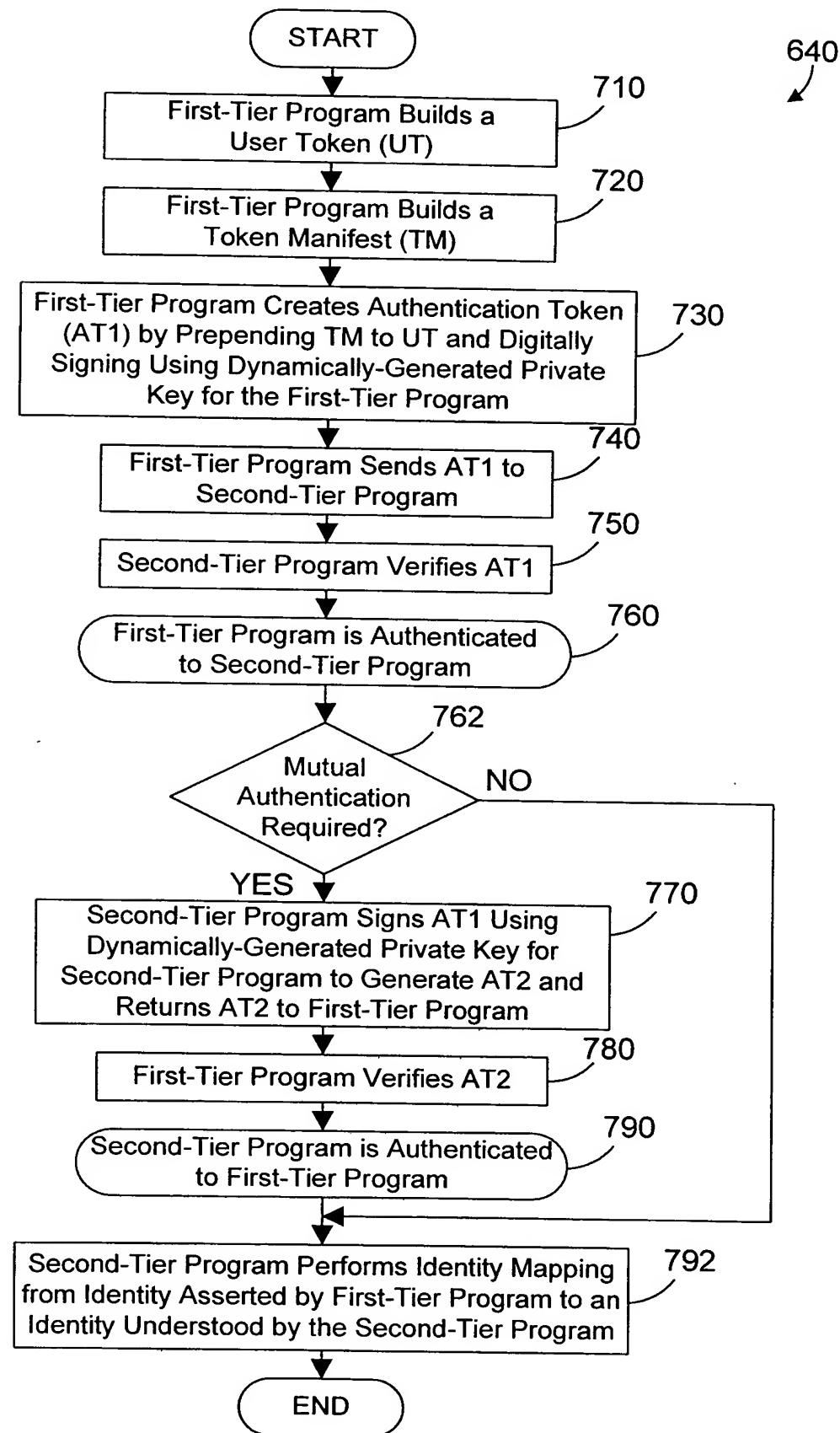


FIG. 7

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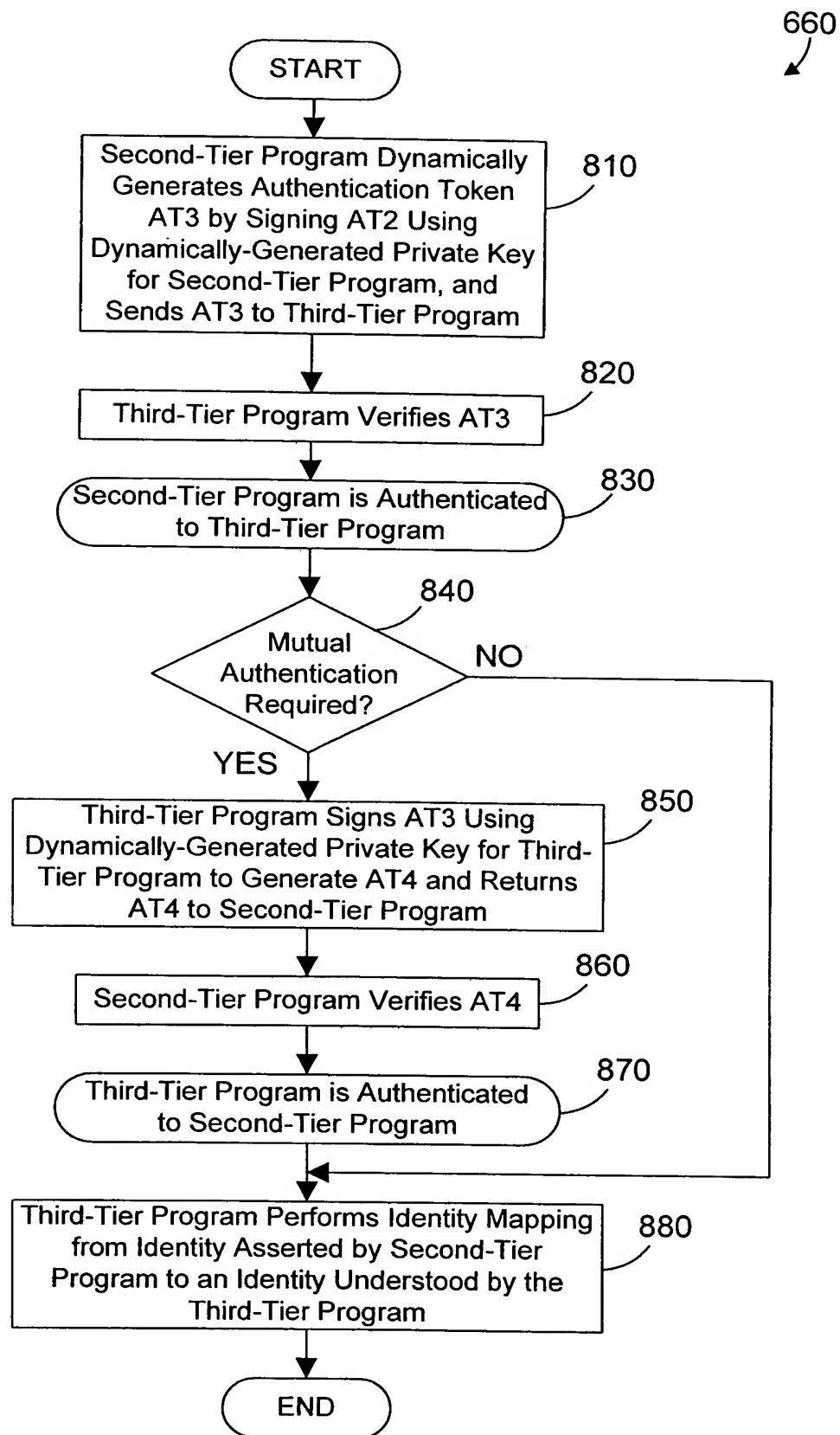


FIG. 8

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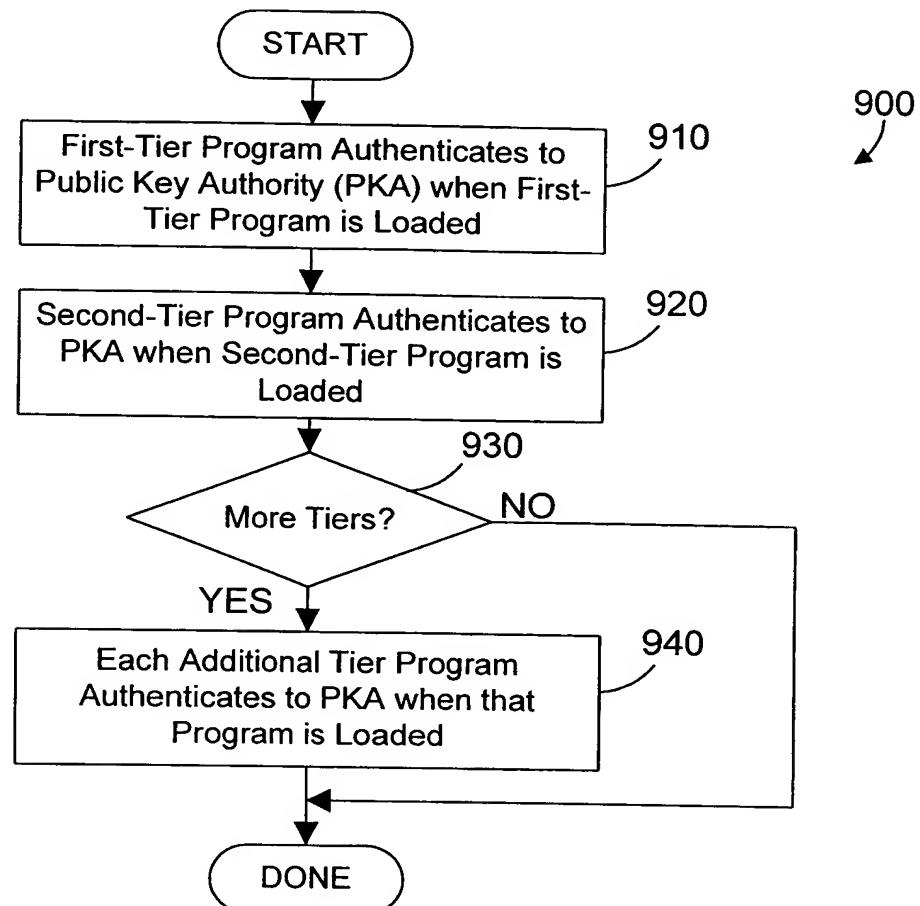


FIG. 9

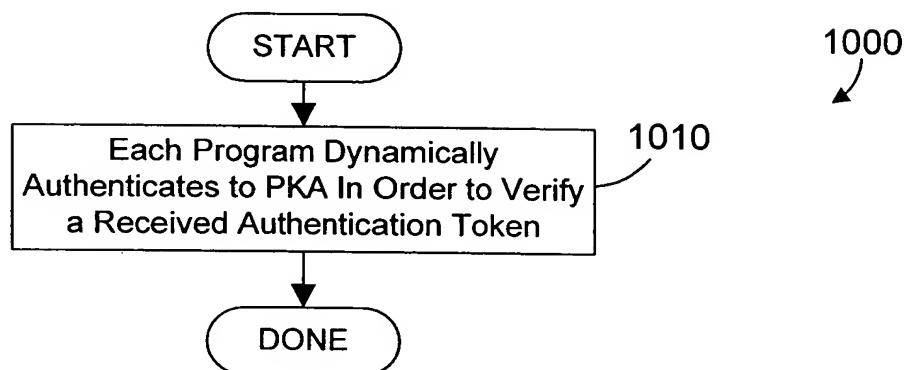


FIG. 10

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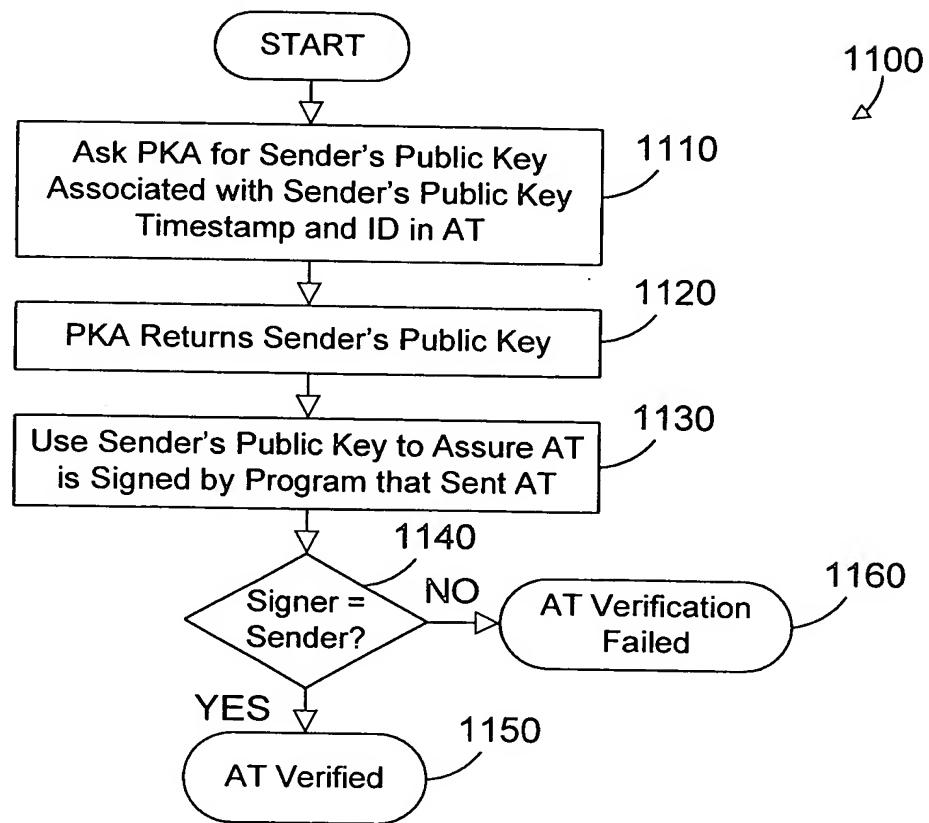


FIG. 11

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Authentication Token (AT)

Signature	Token Manifest (TM)	User Token (UT)
Sender's Private Key over TM and UT	Program ID of Sender Program Length of ID of Sender Program Program ID of Receiver Program Length of ID of Receiving Program Sender's Public Key Timestamp Receiver's Public Key Timestamp Token Manifest Counter Length of TM Mutual Authentication Flag	User ID Length of User ID Registry Name Length of Registry Name

FIG. 12

AT1

Signature of FTP	TM1	UT
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FIG. 13

AT2

Signature of STP	Signature of FTP	TM1	UT
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FIG. 14

AT3

Signature of STP	TM2	Signature of FTP	TM1	UT
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FIG. 15

AT4

Signature of TTP	Signature of STP	TM2	Signature of FTP	TM1	UT
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FIG. 16

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AT5						
Signature of TTP	TM3	Signature of STP	TM2	Signature of FTP	TM1	UT

FIG. 17

ATN						
Signature of NTP	TMN	...	Signature of TTP	TM3	Signature of STP	TM2

FIG. 18

AT3'					
Signature of PKA	Signature of STP	TM2	Signature of FTP	TM1	UT

FIG. 19

AT5'						
Signature of PKA	Signature of TTP	TM3	Signature of STP	TM2	Signature of FTP	TM1

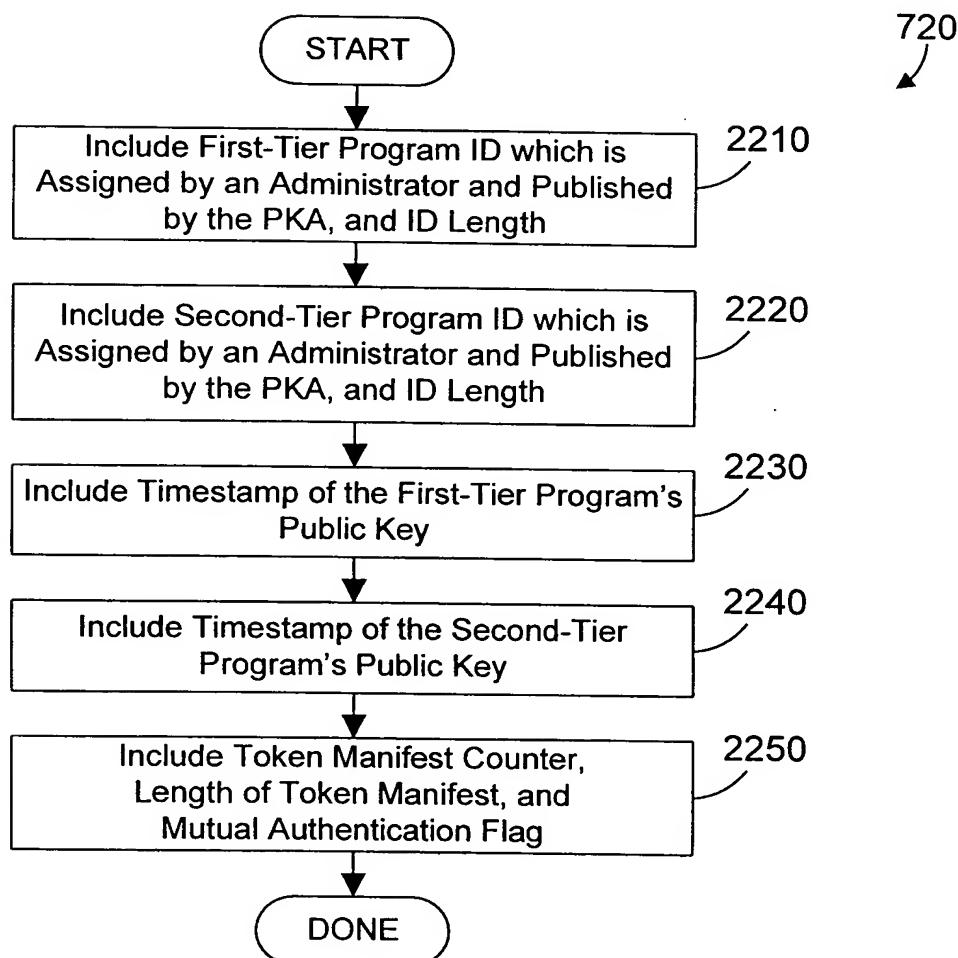
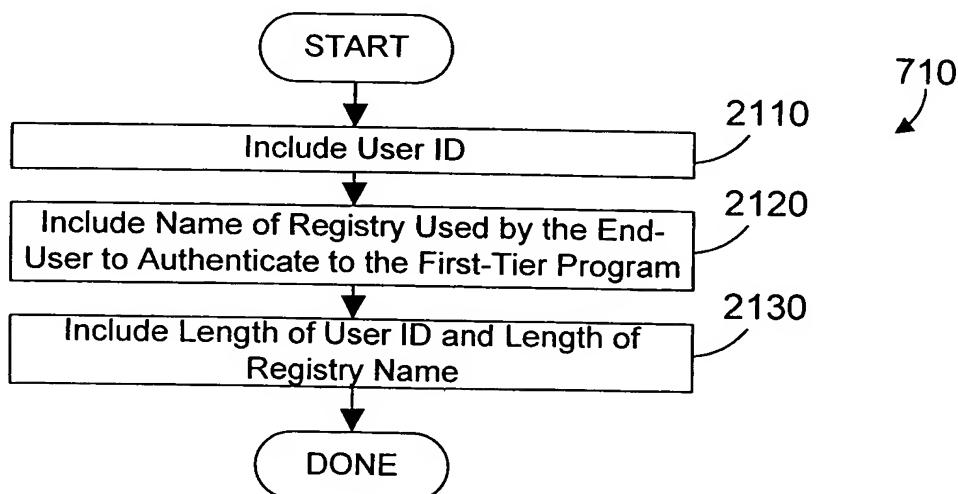
FIG. 20

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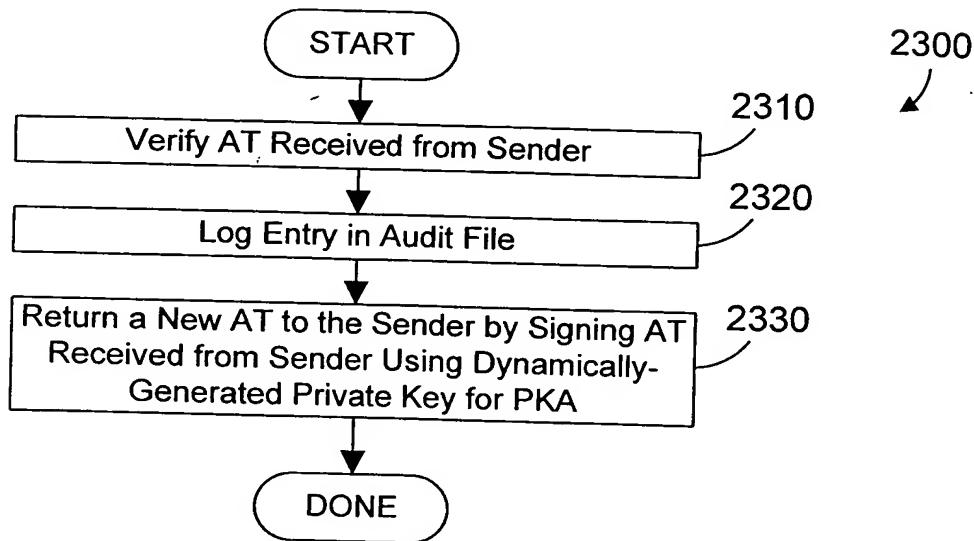


FIG. 23